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LECTURES

ON THE

PRINCIPLES AND PRACTICE

OF PHYSIC,

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LECTURE 22.

On Rheumatism, and the Diagnosis of Gout and Rheumatism.

In this Lecture I shall make some observations on *Rheumatism*, and also on the *distinctions* which exist between that affection and *Gout*.

Rheumatism, like gout, derives its name from the supposition that the fluids were principally affected. The tendency to rheumatism, like that of gout, exists more strongly in some families than in others; and I have seen several examples in which persons having a tendency to rheumatism were very liable to chronic affections of the heart and attacks of inflammation of the pericardium. The tendency to rheumatism, however, is far more frequently *acquired* than hereditary, being generally connected with great or sudden alternations in the surrounding temperature. Indeed the most common exciting cause of rheumatism is cold, or a low or variable temperature of the atmosphere. Rheumatism, therefore, prevails more in the spring and winter; but it not unfrequently occurs in wet autumns, and even in summer when the mornings and evenings are cold, and the middle of the day hot. People are often attacked by rheumatism after having been drenched in the rain, and especially if they sit down and rest in their wet clothes; or after sleeping in damp beds, or wearing damp linen; or from being exposed to currents of cold air; and sometimes it arises from leaving off some part of the dress, such as a flannel waistcoat, or the like.

Rheumatism, when once induced, has three forms. As far as the inflammation is concerned, it is either acute, subacute, or chronic. The acute and subacute merely differ in degree, in as much as in the acute the local inflammation is more severe and the fever is higher. The chronic form of rheumatism is principally distinguished by the absence of fever. When a patient is attacked by the acute or subacute form, he has a very hot skin, a rapid round pulse, generally ranging from 110 to 120, or 130; there is an aching numb pain in the affected part, which amounts to very acute pain on any motion of that part. There is very little redness or swelling at first about the site of the pain, and the patient is liable to abatements and increases of the fever; the former commonly occurring towards morning, the latter towards evening; and where the pain is urgent the skin is often moist. The urine is generally scanty, high coloured, and turbid. The larger joints are more frequently the seats of rheumatism than the small ones; the pain frequently wanders from one part to another, or shoots in the course of the muscles; and we have instances of spasm attacking the bowels, and more particularly the intercostal muscles, which should always be narrowly noticed, since they are sometimes the precursors of inflammation within the abdomen or chest.

The duration of acute and subacute rheumatism is various, but there is one observation applicable to this affection, namely, if it be not checked at the onset by prompt and proper measures, it most frequently has a sort

of determinate duration, continuing from two to three, or even four weeks, especially if the weather be cold or changeable. It is, therefore, of great importance to arrest rheumatism at the beginning. Recollect what I before said with respect to fever generally—you must not confine your attention to the external pathology, but always regard the internal pathology. The external inflammation maintains the fever—maintains the increase of the heart's action and the increase of the animal heat, so that if any internal part of the body be disposed to inflammation, it takes place there, from the excitement operating, through the blood, upon the capillary vessels of particular organs. Hence the disorder may be either simple or complicated; simple, not in reference to the fever which I before described under the name of common simple fever, but because the fever may be only accompanied by the external inflammation; it may be complicated in as much as it may be accompanied by an internal inflammation, and that internal inflammation usually arises from the general law of excitement operating on weak organs.

Cases.

I once attended a medical man who had lived some time in hot climates, who had, on that account, a predisposed liver; he was attacked here by rheumatism, in the progress of which his liver became inflamed. I likewise attended a young lady who had an attack of acute rheumatism, simple at first, but it became complicated with inflammation of the bowels, which were out of order at the time of the seizure. I saw a gentleman who laboured under simple rheumatism, the inflammation being merely external in the first instance; but he sustained, in its course, a great mental shock from the death of a relation, and though he rallied from that shock, yet his brain, spinal cord, and mucous membrane of the stomach and bowels all became inflamed. The internal inflammation sometimes, however, arises in another way. A lady, for example, had rheumatism seated about the hip-joint; it suddenly left that part, the bowels became inflamed, and the patient had a narrow escape for her life. A poor woman in the hospital, some time ago, had a slight attack of rheumatism in the left elbow; it left the elbow, and the dura mater was attacked by inflammation; she complained of a dull aching pain, diffused over her head, which alternated for some days with that of the elbow; the head affection at last became permanent and extremely severe, and terminated fatally. The dura mater, the pia mater, and arachnoid membrane were found much inflamed. —An individual was affected by slight external rheumatism; it suddenly left the external part and the pericardium became affected; he was seized with a pain in the region of the heart—an anxious, short, unequal respiration; had a dread of turning on the left side, a tendency to syncope on motion, in short, all the symptoms indicative of an inflammation of the pericardium. I knew another individual who laboured under scarlet fever, during the rise of which he was affected by a disorder, exactly resembling rheumatism, in one of his ancles, and I have met with a similar disorder often in cases of scarlatina, occupying different parts; but in this case the external inflammation receded, and the pericardium became inflamed. In October 1823, I saw a gentleman who was convalescent from rheumatism, he went out and got chilled; the pericardium became inflamed, but subsequently he recovered; so did the other patient who had the scarlet fever.

Whenever you attend a patient labouring under rheumatism, be exceedingly cautious in regulating the temperature of his apartment, because if he has a chill he may be attacked by inflammation in some internal organ. The thermometer should be kept hung up in the apartment, the temperature of which may range between 58 and 62 degrees. The consequence of acute and subacute rheumatism is sometimes

Chronic Rheumatism.

The fever abates, and perhaps at last leaves the patient, yet the joints remain chronically affected. I am attending a case of that kind now, in

which, with a numbness in the left elbow and swelling of the bursæ there are the sequelæ of acute rheumatism. Sometimes the inflammation puts on a different character, passes on, in fact, to the disorganization of the joint very insidiously, under the form of what is called white swelling; if the patient's strength be broken up by a previously acute disorder, and if any parts of the body, especially the joints, become the seats of chronic inflammation, that inflammation sometimes puts on the strumous character, a case of which I recently saw. Where the strength is broken up, be sure to keep the liver, stomach, and bowels in good order during convalescence, and be sure also to guard the patient against cold. Chronic rheumatism arises sometimes entirely independent of any acute or subacute form; from exposure, for instance, to extremes of temperature. The pain of chronic rheumatism is sometimes increased by the warmth of the bed, and I have known some individuals who could not wear flannel; but it is generally lessened by the warmth of the bed, provided the clothing be not excessive. The joints in which it is seated are stiff, and feel cold and painful, the pain being increased by motion, and by every remarkable change of weather. Patients with chronic rheumatism may be considered good barometers, for they can anticipate changes in the weather with considerable certainty.

Chronic rheumatism, when it attacks the parts about the hip, in the course of the sciatic nerve, has been called *sciatica*; when the parts about the loins, especially the lumbar fascia, or muscles, are its seat, it is called *lumbago*; but it often attacks the hands, the feet, the shoulders, the elbows, or the knees, especially the bursæ about these joints.

Diagnosis.

There is one affection which you may easily confound with rheumatism, and that is, what has been denominated *gout*. The ancients did confound gout with rheumatism; but, as far as the characters of the mere external inflammation are concerned, they are very different, to say nothing now of the internal pathology. The following are the *main diagnostic symptoms* between *gout and rheumatism*:—1. Gout scarcely ever occurs before the age of puberty; I have only known two examples to the contrary. 2. Disorder of the mucous membrane of the alimentary canal always precedes and attends the gout, whereas in rheumatism that is not generally the case. 3. In the next place, whether the disorder be primary or secondary, cases of gout never exist without it, gout standing to that disorder in the relation of an effect, being, in a word, nothing more than a part of that extensive series of inflammations which arise in different structures sympathetically, from a disordered condition of the mucous structure before named; but rheumatism may almost always be traced to cold as its exciting cause. 4. Gout is generally seated, on the first attack, in the great toe; but I mentioned a case in which it happened in the finger of a young barrister; whereas in rheumatism the inflammation settles in some other joint than the great toe. 5. The inflammation which occurs in gout is of a vivid, shining, smooth red, the parts swell rapidly, and are remarkably tender, the pain being sharp and burning; on the contrary, the part is more slightly red and far less swollen in rheumatism than in gout, and the pain, when the part is at rest, is comparatively of a numb aching kind. This difference between the pain of gout and that of rheumatism is so distinct, that individuals who have had both can distinguish the one from the other. 6. In the next place, there are more distinct remissions during the progress of gout than rheumatism; besides, the form is more highly developed in acute or subacute rheumatism than it is in gout. With respect to the chronic gout, it may be generally distinguished, first by the greater degree of swelling in the affected part, and secondly by the simultaneous disorder of some portion of the alimentary canal.

The gout too appears to attack more structures at once than rheumatism; the serous, the fibrous, the cel-

fular, and cutaneous membranes, I repeat, about one and the same time; which is not the case usually in rheumatism, although it may be a next-door neighbour. The seat of rheumatism is obviously various. Sometimes it is in the muscles, sometimes in the fasciæ, sometimes in the synovial membrane, sometimes in the sheaths of nerves, and sometimes, perhaps, in the fibrous substance of the nerves themselves.

There are some inflammations of a rheumatic kind which may be confounded with other affections, and I shall now, therefore, speak of the diagnosis of these.

A rheumatic affection of the *nerves* follows the course of the nerves, the pain is numb and of an aching kind, generally constant, but occasionally exasperated by paroxysms; this invariably increases by pressure. If in the sciatic nerve, it may be distinguished from inflammation of the hip-joint by the pain and enlargement which attends the latter affection, and as the hip-joint is the centre of motion between the trunk and the lower extremities, so the movement of either increases the pain in the joint; the pain is also increased by making pressure in the region of the joint and on the sole of the foot upwards. These characteristics will guide you in the earlier stages, especially if you attend to the position in which patients lie in hip affections, the trunk being always more or less turned to one side, so as to relieve the hip as much as possible.

You might confound lumbago with psoas abscess, but the pain of the back in the latter is very insidious, it is what poor persons call a weak pain, especially in walking or standing. Uneasiness is often caused in psoas abscess when the foot is turned outwards, or when pressure is made upon the lumbar vertebræ. But there is one remarkable circumstance attending psoas abscess, which is, that the patient does not fully extend the thigh without at the same time bending the trunk. A tumour also forms in the groin in the progress of the disease,

which dilates on coughing. You might confound lumbago with the inflammation of the kidney, or of the root of the liver; but if you attend to the diagnostics which I laid down in a former lecture, you will never be mistaken in your opinion. You must not fail either to remember what I formerly said with respect to an overloaded condition of the colon, which I have known to be treated as a rheumatic affection of the loins. Do not forget, that in lumbago the attempt to get up or sit down is always attended by a great increase of pain.

Again, you might confound rheumatic pains with those of syphilis. You are aware that syphilis assumes three characters: the primary, the symptoms of which are chancre and bubo; the secondary, in which the throat and soft parts of the surface are affected, with disturbance of the general health; the ternary, in which the disease attacks the hard parts of the body, or the bones, or rather first their periosteal covering. It is the last form of syphilis only which could be confounded with rheumatism, but by tracing the history of the case backwards, you will find that the patient had a chancre and inflammation, and ulceration in his throat, with blotches on the skin, and finally inflammation of the periosteum, producing a node where the pain is seated; moreover, the general health, as before observed, is much disturbed, the skin being of a dirty sallow hue, and the mucous membrane of the prima viæ is invariably in such cases less or more concerned.

To sum up my opinions—I would say, recollect that I have mentioned three forms of rheumatism,—1. The acute; 2. The subacute; 3. The chronic. The acute form is distinguished by the great local pain, and by the highly developed fever. The subacute form is distinguished by the less degree of pain, and by the less degree of fever. During the progress of the acute and subacute forms of rheumatism, the internal parts may become inflamed. 1. From the law of increased excitement operating upon weak organs; and 2. From metastasis, or

a translation of the inflammation from the external to the internal parts, particularly to the fibrous and muscular structures. Chronic rheumatism sometimes supervenes as the consequence of the acute or subacute form, and at other times it arises as a primary affection, independent of fever, especially in such individuals as are exposed to currents of cold air.

There is another subject, apparently connected with this, which requires more minute examination; it is what is commonly called *rheumatic gout* and *rheumatic palsy*. What is called rheumatic gout is very often connected with some affection of the stomach, liver, and bowels, either of one or of all of these parts. What is called rheumatic palsy is connected with some disease of the brain or of the spinal cord. Whenever you find a patient labouring under an apparently chronic rheumatism, you should make a point of examining every organ physiologically and pathologically. Examine into the state, not only of the stomach, liver, and bowels, but of the brain and spinal cord, and trace the disorder from its origin to its present condition. If you suspect the brain or spinal cord to be disordered, trace the history of the case most minutely; consider what the physiology of the brain is, and contrast the healthy functions with the existing symptoms. Do the same with the spinal cord, and you will soon ascertain if it be the seat of disorder. Many serious affections of the brain and spinal cord are announced by pains in the upper or lower extremities: if these pains be timely attended to, and if their cause be properly understood, they are generally soon removed by evacuations; but if these pains be overlooked, or if their cause be not clearly comprehended, apoplexy, or palsy, is the most common result. Do, therefore be most assiduous in investigating the cause of all such affections.

LECTURES
ON
PHRENOLOGY,
BY
DR. SPURZHEIM.

LECTURE 2.

LADIES AND GENTLEMEN,

You will perhaps forgive me for bringing again before your notice some points which I mentioned on the former evening, but as they are important I am anxious they should be well understood. I spoke of the constitution of the body, or the temperament, and its influence on the manifestations of the mind; but that in phrenology we admit the influence of the temperaments only as far as they affect the degree of activity of the intellectual powers, not as giving origin to them. I have only spoken of the brain in a general way; that it is the organ of the manifestations of the mind; I hope you do not think that I admit the brain to be the organ of the mind from the few proofs I have already adduced; many more will hereafter be brought before you. However, let it be understood, that in phrenology we consider the brain not only as necessary to the existence of the intellectual faculties, but also that its degree of development exercises a considerable influence on the manifestations of the mind. You will recollect what I said on this subject, that the brain, as to its absolute size, is not sufficient to measure the talents. You cannot go from one individual to another, and say, your head is larger than your neighbour's, hence you have more talents. Nor is the proportionate size of the brain to that of the body indicative of the strength of the intellect; and I also said, that the measurement of the forehead with the face failed in its object, for we cannot by it indicate the different degrees of talent.

I shall proceed now to another principle in phrenology, namely, that there is a *plurality of mental powers*, and that every faculty is manifested by a *peculiar organic apparatus*.

The doctrine of the plurality of powers is very ancient. I do not know any system of philosophy which has been satisfied with one single power of the mind; all the founders of such systems have thought it necessary to admit several powers. All of you know that the understanding and the will are commonly spoken of in treating of the mind; hence we find *two* general powers at least. Have philosophers been satisfied with the understanding and the will? No. They have subdivided these into memory, judgment, imagination, and the association of ideas, &c.; therefore, I repeat, that the idea of the plurality of the mental powers is not new, but as ancient as philosophy. Physiologists have also, in observing the functions of various organs of the body, assigned certain feelings to these organs, and to the brain they have assigned some as well as to the rest. Even so early as in the twelfth century, and particularly in the fifteenth, we find individual powers not only ascribed to the brain but marked upon the head, according to the prevailing doctrine of the schools,—as common sense, of memory, and so on. My object is here to mention, that the doctrine of the plurality of the powers of the mind has been adopted by ancient philosophers, but no determinate powers had been assigned by them.

How shall we proceed now to ascertain the functions of the several parts? I am sure that every one who reflects upon the mental manifestations must feel convinced, that it is impossible to ascribe them all to one power of the mind. Do you think that one person is capable of doing every thing with the same degree of perfection? The mind requires the medium of the external senses by which to hold communication with the external world; there are eyes to see, ears to hear. Now we see that sometimes individuals are deprived of one or more of these senses, yet the others remain; a man may become blind, yet he will continue to hear, and may we not from these occurrences infer, that there is a division of the senses. We see also that the mind, in like manner, is sometimes deprived of certain of its manifestations, and yet the others remain; a man may, for instance, be insane on some points, and yet remain in full exercise of the intellect on all other subjects; hence, I think, that we must allow, not only a plurality of powers, but also that these powers are dependent on a plurality of organic parts. Shall we turn to the dissection of the brain to explain its functions? we certainly know more of the structure of the brain than was formerly known: can we learn the functions of the brain by that dissection? I have seen many individuals extremely anxious to know the structure of the brain; but a knowledge of that alone cannot teach the cerebral functions. Can anatomy show the functions of any part? Look at the olfactory nerve; can you recognise its function? You may see the optic nerve as it passes to the eye; you may see its figure, its colour, its density, but can you learn from this observation that it is destined to receive the impressions of light. Look again at the muscular fibre; you may observe its vascularity, its colour, but can you learn from these qualities that the muscle is contractile? No; it is to physiology we must look for the knowledge of functions, however accurate our knowledge of structure may be. Anatomy is useful to physiology, but anatomy without physiology is dead. Anatomy can no more show the functions of the brain than it can those of other parts of the body; these can only be arrived at by a careful observation of nature. Anatomy, however, can never be in contradiction with physiology. If I could show that the structure of the brain is in contradiction to the functions ascribed to it by physiologists, then I would say phrenology is altogether destroyed. You will recollect, in the last of the hydrocephalic heads which I showed to you on the last evening, there was an immense development of skull, but it was distended by water, and the brain lay at the bottom. In some other cases the brain is distended like a bladder, the water being within the ventricles. Now if anatomy could not show that the structure of the brain admitted of such a change, there would be a great imperfection in our knowledge; but when anatomy does show that

such a change can take place, anatomy will be in harmony with physiology. To arrive at a knowledge of the functions of the brain, we must observe them during life, as well as the functions of other parts of the body.

Persons have proposed to mutilate the different parts of the brain to obtain a knowledge of the offices of these parts, and in former times the same means have been resorted to. Many poor animals have been tormented without ascertaining this point. Particular parts of the brain have been cut away, and other parts of the brain injured, to observe the effects of these injuries on the feelings of the animals; and this method of investigation has been extensively employed in France, and is to this day. Among other experiments, they have pricked the *corpora striata*, which are bands of fibres passing to the anterior parts of the brain, and they have observed that the animal has run forward, they have injured, in the same way, the *cerebellum*, or the little brain, and the animal has run backward; so by destroying particular parts they have found that the motions of animals have been destroyed. I grant this, as far as the facts go; but shall we draw this inference and say, that these parts of the brain have *no other* functions? I cannot be satisfied with such an inference. My manner of judging as to the truth of any physiological doctrine is this: if I see anatomy in harmony with physiology, and anatomy and physiology with pathology, and pathology with the former sciences, and that they all harmonize with each other, then I admit the doctrine to be true; but if I find anatomy at variance with physiology or pathology, then I cannot admit it to be true. You must always value facts although you may not completely understand their import; but you must distinguish between facts and inferences. You must have observed that voluntary motion is destroyed when serious injury is done to the head, but you would not infer that the whole brain is destined to the power of voluntary motion.

I come now to another mode which we have recourse to for ascertaining the functions of the several parts, namely, the *size*. Here I must request you to attend to the distinction between the means we employ to ascertain the nature of the cerebral functions and the causes which produce the different degrees of activity of the primitive functions. I repeat, that it is an essential thing in phrenology to understand these two sorts of ideas, for if any man confounds them he can never become a good practical phrenologist. We employ the size of the cerebral parts as means to ascertain the nature of their functions, but different degrees of activity cannot be measured by the size alone. A muscle is destined to voluntary motion, and we may observe the muscles when in action; but do the different degrees of voluntary motion depend upon the size of the muscles alone? Can we be satisfied with saying that? If this were true, we should find that large muscles have more strength than small ones, and that the large are more active than the small; but daily experience teaches us the contrary. The same may be said of the brain; the size is sufficient to determine the nature of the function of the brain, but the size is not the only condition which contributes to the activity of the brain. The study of determining the nature of a function is more easy than it is to determine the degree of activity of a function. We speak first of the nature and then of the degree of activity of a function; and the second is more difficult than the first. Bodily constitution, exercise of the individual parts destined to certain offices, will produce a greater degree of activity in them; we see this every day. We must also consider the mutual influence of the powers; one power is excited by another, and one part prevented from performing its office by injury done to another. Every one who practises phrenology is too much inclined to measure the different degrees of activity by the size alone, and I therefore never forget to insist so much on its inaccuracy in my lectures, hence I hope you will not impute to me errors committed in this way.

Is the size of heads different? Look, in a general way, to the heads of

persons, and you will be astonished to see what a difference there is between them, and it is only surprising how this difference has been overlooked. Yet you will hear some anatomists now say, "Oh! all brains are alike." We know each other by the shape of the face—no two are to be found alike, yet the parts are essentially the same; and if people wore masks to conceal their faces, I am sure they would soon know each other by the shape of their heads. (A laugh.) There are small heads and large heads, narrow heads and broad heads, short ones and long ones. Look at these casts, you will see all the shapes I have mentioned (showing several casts); every one of them is different. By habit, or experience, you would soon be able to distinguish heads by less striking differences of formation than in those I have shown you, and you would be able to apply that knowledge to practical purposes.

How, in a general way, do you proceed to ascertain the size of the head? Proceed in this way: you draw a line from the external opening of the ear to the middle of that part where, in children, the *fontanelle* is observed; or, to those who are not acquainted with anatomy, I may say, the middle of the head, and continue it to the opposite ear. This line divides the head into two regions, the one toward the forehead, being called the *frontal region*, and the other toward the *occiput*, or back part of the head, being called the *occipital region*. Be now attentive to individuals and you will find the greatest difference in the size of the two regions; you will find some who have almost all the brain in the frontal, and others will have the greatest portion of brain in the occipital region. These are facts, what use we can make of them remains to be shown. In looking at individuals, be attentive to the direction in which the brain is most elevated. Draw lines from the ear to the centre of the elevated parts and see which radii are the longest. I mention this for the following reason: in anatomy we shall find that the different cerebral parts are concentrated more or less toward the middle of the base of the brain; speaking to anatomists I should say, we must look at the *occipital foramen*, and as we know that the brain begins a little in front of the occipital hole, and as the ear is in a line with that point, so in measuring from the ear we come as near as possible to the centre; and from this point the different parts of the brain take different directions. Hence, in a head of this kind (showing a cast), the longest radius goes over the back part, and we know by it that the occipital region contains more brain than the frontal. Here are others (showing some casts) which have more brain in the frontal than in the occipital region. At the same time observe, in what portion of the transverse line the head is most prominent. You must become accustomed to the degrees of elevation of the head, and you will discover great differences; some are flat at the top and broad at the sides, others flat on the sides and expanded on the upper part. Divide the head again into two regions, by carrying a line horizontally from the middle of the forehead to the upper edge of the occipital bone, and you will find that, in many individuals, the greatest portion of brain will be situated below this line toward the base of the skull, which may be called the *basilar region*; whilst, in others, the greatest quantity of brain will be found above this line, toward the top of the head, and which may be called the *syncipital region*. Here are specimens, in some of which you see that the greatest portion of brain is situated above this line, and in others, below it. In looking at heads generally, you will find that in the greatest number the occipital and basilar regions are very large—much larger than the syncipital and frontal regions.

I wish to make one general observation on this point; look to the elevation in proportion to the breadth: see these heads (showing two casts); this is certainly narrower on the sides than the other, but it is higher, so that this may be said to be less broad than high; the other, on the contrary, is much broader than it is high. You must be convinced that in every individual some such differences exist, and therefore that there are modifications of the mental powers.

You may ask me what is the reason for such difference—what is the cause rather? This question is physiological and philosophical. I might, for example, examine the influence of the brain, in its form and size, during the period of development and its influence on the skull; and that it does influence the shape of the skull there can be no doubt. We might also mention the effect of artificial pressure, but it would be tedious to go into all the particulars here. With respect to artificial pressure, I have only here three skulls of Carribs, but each of them is flat on the forehead and very much elongated behind. I have been informed, that there are some tribes in whom the posterior part of the head is flattened instead of the front part, and that these depressions and flattings of the head are produced by such artificial pressure. Our information is not so precise on this point as it should be; I am not satisfied with these few observations; I wish it may prove possible to prevent the development of certain parts of the brain; certainly if this could be done it would be a great benefit to mankind. It is necessary to ascertain whether the children among the Carribs have such depressed foreheads, or whether their foreheads are like those of European children, and are flattened afterwards by artificial pressure; and it would be satisfactory to know, how the machinery is applied, and how long it is continued. Some have informed me, that the pressure is used from the age of six weeks to two years; but I have observed, that persons who have been in that country circulate very vague reports. Besides, it is well known that the heads of children undergo great changes, and that certain changes continue to take place even until a person reaches twenty years of age, and if they continue the pressure only two years, would that be sufficient to prevent any future development. Then, again, if there be pressure applied to the forehead, I should like to know how the apparatus is applied without producing counter pressure. I find the anterior part of the head much depressed, and I find the posterior part very much developed; now if a string were tied all round the head it must prevent the development all round. I cannot conceive of there being pressure without there being counter pressure.

Those who have the opportunity of examining such brains, might render great service to phrenology by attending to these particulars. I suppose that it is possible by determinate pressure, to prevent the development of the brain in that direction. Would they find the development of the internal parts prevented, or would they be found only pushed on one side.

We admit the influence of different causes in producing this effect, and certainly the brain has a great influence on the configuration of the head, but it is not the only cause. Those who wish to enter into this part, must study it attentively for themselves; it would not suit you to proceed further at present with this branch of the subject.

Now we come to another point; is it possible, seeing the different developments in different individuals, that they are greater in certain parts than in others? Is it possible to discover the cerebral functions attached to the different developments? It is certain that the size of the brain contained in the skull, is not the same as that of the whole head. You must be aware the hair is greater in quantity in some individuals than in others, that the skin is thicker in some than others, and, therefore, when you wish to arrive at the real size of the brain, you must make these allowances, and observation soon sets us right. How is the size then to be ascertained? By the sight or by the touch, our object is to ascertain the size of the cerebral parts, whether by touch or by inspection. I could tell from mere inspection whether the skin was thick or thin, and an anatomist could do the same. Moreover, there are muscles on both sides of the head, and these muscles are very different in size in different persons, and you judge of the size of the muscles there by looking at the size of the muscles of the face. If

you see a man with a muscular face and a chubby cheek, you may conclude that the temporal muscles, for so they are called, are also large; if the muscles of the cheek be thin, you draw the inference that these muscles are thin also. It is therefore of importance, in the study of phrenology, to attend to this circumstance. In all sciences, certain individuals will experience difficulties, and so they will in acquiring a knowledge of phrenology, as well as in mathematics or in chemistry, but by observation and perseverance many difficulties may be removed.

The general form of the brain is always similar to the general form of the skull. Now if you will look at these brains and skulls, you will see that it is so. (The Doctor showed many brains and skulls, in which the correspondence was perfect.) This is the way in which we ascertain that the development of the brain is in proportion to the configuration of the head. In speaking of these similarities, you must not think that we are attentive to minute differences, or of mere lines,* they would be useless; no, we look to generalities, and we see that they correspond.

Some persons have said, that you cannot discover the size of the brain from the configuration of the skull, because there is no parallelism between the two tables of the cranium. Any anatomist must know that in opening skulls, there is no parallelism between any two tables, but does he not find that the brain corresponds to the general size of the skull? Those who have made this objection, have never, I am sure, looked to nature. Differences of form always indicate differences in the development of the several parts of the brain. I am certain that it is possible to ascertain the development of the parts of the brain from the external configuration of the skull, from the birth of children to the time at which the brain begins to diminish and shrink in age; the brain becomes more perfect in its organization, as other parts of the body; it is still in the middle period of life, and in old age the brain diminishes in size as the muscles and other soft parts of the body decrease. From the period of birth then, to the period when the brain begins to diminish, when the individual begins to complain of a defect in his intellectual powers, when the memory goes away, and the other powers go away, it is certain that, till then, the brain does bear a correct proportion to the configuration of the head; but after this period the brain shrinks, while the external circumference remains the same. In children, the skull is very thin, and does not become considerably thicker until after about fifteen years of age; at thirty, it is of the common size, and remains so until the decline of life, but in old persons it becomes frequently thicker, although the natural form is retained. The bones of the head are often also very much thickened in chronic insanity. The thickest I ever saw is this, the skull is one inch and a half thick; the person died at the age of 65, and was idiotic for ten years previously to her death. Is it necessary to ascertain the function of the brain to make our observations in old age, and in the diseased state? The important thing is to make our observations on persons who are in healthy activity, and in whom the functions are all healthy, and in such persons up to the middle age, and even beyond it, we can with certainty tell the shape of the brain by the configuration of the head. We are often asked by persons who have not studied the subject about the import of trifling sprouts of bone on the skull, and little projections and depressions of bone. They mean nothing, they are irregularities of the bone only, we pay no attention to them, but to the greater development of different parts in various directions.

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* A *line* is an expression much used on the Continent, it means in measure about one-twelfth of an inch.—Ed. L.

REVIEW.

HISTOIRE DES MARAIS, *et des* MALADIES *causées par les emanations des Eaux Stagnantes: Ouvrage couronné par l' Academie Royale des Sciences, Belles Lettres, et Arts de Lyon.* Par J. B. MONFALCON, D. M. Paris, 1824.

A HISTORY OF MARSHES, *and of the* DISEASES *caused by the emanations from Stagnant Waters: a work which obtained the prize of the Royal Academy of Sciences, Belles Lettres, and Arts of Lyons.* By J. B. MONFALCON, M. D. pp. 510. Paris, 1824.

A HOST of writers have, from time to time, favoured us with their researches on this important subject, but their statements have been so unconnected, and their opinions so vague and contradictory, that little information is to be gleaned from their productions. Each has devoted his attention to some given object, and has restricted his inquiries within certain topographical limits, so that, to arrive at the knowledge of what has been already written, it would be necessary to furnish ourselves with a mass of detached intelligence of itself sufficient to occupy a great part of a modern library. The design of the work we are about to analyse, is to embody the labours of former investigators; to disencumber the useful from the useless parts, and to supply what they have left defective.

We might refer to the following authors as furnishing examples of the defects of which we have complained: to CURRIE and BLANE, PRINGLE and PHILIP, amongst the English; and to ALIBERT and CHAPTAL, FODERE and RIBAUD, among the French. The treatise which might be considered the text book of the present production obtained the prize from the Royal Academy of Sciences of Lyons and Orleans, in the year 1822, since which time the author has been occupied in travelling through the districts in which the marshes abound, and in collecting additional facts. The style in which the book is written is pleasing, and shows that the author can be cheerful without trifling, and serious without being dull; two qualities rarely displayed by a Frenchman. We intend to furnish as much of the transcript of the work as our limits will allow, and shall therefore make our introductory remarks very short.

The subject is divided into four principal parts, the *first* containing an exposition of facts; the *second*, an account of the action of the marshy emanations, physiologically and pathologically; the *third*, inferences drawn from the facts stated; the *fourth*, the *hygiene*, or measures to be adopted for the prevention of disease; and the therapentical agents to be employed.

The two first will be found to contain much interesting matter, and the manner in which the observations have been registered evinces that the author is a man of considerable ability. "Were it my business to understand physic," says Locke, "would not the safer way be to consult nature herself, in the history of diseases and their cures, than to espouse the principles of the dogmatists, methodists, or che-

mists?" Dr. MONFALCON appears to have been fully aware of the value of this mode of investigation, and that he is a minute observer of nature is evident from the following animated sketch which he has drawn of the physical and moral character of the inhabitants of the districts about to be described.

"There exist," says he, "in the midst of the most flourishing states of Europe, large tracts of country in which stagnant waters abound. A degenerated race of men inhabits them, who may be said to be always carrying about with them destructive diseases. The extreme depression of their appearance, and the little energy of their physical and moral character, furnish striking contrasts to the condition of the happy population by which they are surrounded. This people, disinherited, as it were, by nature, have no enjoyment of life; the melancholy influence of the air in which they live is strongly expressed in their countenances, and modifies, in an extraordinary degree, all their functions and faculties. They are born invalids, and they cease to exist at the ordinary age of vigour. Infancy has lost among them its charms to please; instead of the plumpness and delicacy which should delight us, we find only numerous wrinkles disfiguring their countenances; the skin is discoloured, and without much elasticity; a puffiness of the limbs soon deprives them of agility, and their physiognomy is without the least expression of energy.

The inhabitant of such a country has certain physical characters peculiar to himself; the abdomen is voluminous, the chest narrow, the neck long, the voice raucous, the gait feeble; diminutive in stature, and frequently deformed, he appears never to enjoy existence, and, with him, to live is but to suffer. His intelligence is degraded with the organization; it partakes neither of the lively energy of youth, nor of the sound judgment of a more mature age. His passions are as gloomy and cold as the climate, and his mind appears shut up, as a germ destined never to sprout within the narrow boundary of mere instinctive appetence. He is the votary to a blind fatalism; he will tell you that he has voluntarily submitted to his fate. Of his condition, it may be said that the iron hand of destiny has written on the threshold of his door, as on the gate of the infernal region of DANTE, this terrible sentence '*Ici plus d'esperance.*'

"To say nothing of the immense tracks of morass to be found in both hemispheres, there are in France alone 180,000 acres consigned by them to perpetual sterility. Lands overspread by marshes and stagnant waters, have a very striking and peculiar appearance. I have traversed them in all directions. I have examined the cottages and the hospitals, and have conversed freely with the medical practitioner and the landed proprietor, and I have seen these countries at a time when destructive fevers have added to the other misfortunes of their inhabitants. It is during the months of August, September, and October, that these districts present the most mournful spectacles to the scientific traveller; he beholds only the monotonous scenery of quaggy forests, lands capable of culture still swamps, and liquid plains which, bounding the horizon, mingle their colour with the greyish tint of the atmosphere. The vegetation partakes not of the cheering colours of other districts, but is generally of a dull green, inclining to black, or of a dirty yellow tint, with dark patches, and the odour of the plants which most flourish there, as the arum, the hemlock, the hellebore, and the ranonculi, is disagreeable and loathsome. The mind recoils at the sight of the vast solitudes of Bresse and of Sologne, and how can such a feeling be obviated? There the thinly scattered villages, 'few and far between,' are composed only of badly constructed huts, and the stranger has to travel far before he can find a roof under which to rest. If he should by accident get out of the ill-defined path which leads through the country, he searches a long time in vain for a human being of whom he may learn his

route; all is gloom, all is stillness around him, and the only sounds which make silence still more dumb, are the croakings of the frogs, which, at his approach, retreat into their undisputed domains."

Such is the interesting and almost poetic sketch which our author has given of the desolate appearance of the country, and the miserable condition of its inhabitants. He has made a strong appeal to his government to root out what he very properly denominates a national evil, and hints, that if instead of expending tens of thousands annually in supporting useless colonies, they were to apply their resources to this better purpose, vast tracts of land might be rescued from sterility, and the vigour of the population preserved. To show how practicable such a scheme is, he refers to what has been done in Huntingdonshire, Cambridgeshire, and Lincolnshire, and pays a great tribute of respect to the exertion and perseverance of the English character.

We enter now upon the more practical part of the work, but as the terms employed in any language are but the mere media of conveying to others what is passing in the mind, we consider it fair to give the author the benefit of an explanation of such as he has chosen to adopt. We have been accustomed to use the words *effluvia* and *miasmata* synonymously, but a distinction has been made by MOXFALCON; he restricts the meaning of *effluvia* to certain gases which are disengaged from stagnant waters, whilst the term *miasmata* expresses such as exhale from the bodies of men or animals in the diseased state. The word *emanation*, which, employed alone, is vague, has been rendered precise in its application, by affixing to it words expressive of its character, hence we have in the work before us, *putrid* and *marshy* emanations. By the first must be understood such as arise from animal substances deprived of life; and by the second, or *marshy emanations*, are understood extremely minute matters suspended in the atmosphere, ordinarily invisible and inodorous, but sometimes otherwise disengaged from marshes in more or less abundance, according to the state of the air and the temperature, which emanations exercise a powerful influence on organization, giving to men and animals living within the reach a particular constitution, which may be termed their physiological action; secondly, by occasioning the more prompt development of certain diseases, and causing others to spread with greater rapidity, which may be called their pathological action. In Chap. II. of the first division of the work, are some good remarks on the geology, botany, and zoology of marshes, from which the following are extracted.

"The submersed soil is found to vary in different places, both in thickness and the material of which it is composed. Layers or strata of decayed vegetable matters are placed on beds of clay, or on firmer earths impermeable by water. In some parts, when the waters have been drained off by the giving way of a bank which confined them, rich soils have been discovered, formed by the deposit of vegetable matter, washed down by the currents or the beating of the water on the edges of the marsh. This furnishes a matrix for the aquatic plants to take root in, and it is preserved in

its depth by the future decomposition of the same plants.

The pellicle which is seen sometimes on the surface of stagnant waters, is bluish; it is the product of decomposed animal matter in solution. Beneath it you will find abundant organic remains, in the half putrid state, and multitudes of animalculæ of the tribe of *infusoria*.

As to the zoology: we find numerous families of the insect tribe inhabiting stagnant waters, and immediately about them. Myriads of these little beings sport upon the surface, and fill the atmosphere round about. To enumerate these would be tiresome and difficult. Worms are numerous, and some shelled fish univalved and bivalved, are to be found. Frogs, toads, and salamanders, are in the greatest abundance. Snakes show themselves frequently, especially the blue snake, and occasionally vipers are to be seen. Numerous tribes of ill-shaped fishes and water-fowls are found amongst the marshes; but the otter and water rat are the only quadrupeds to be found."

When speaking in Chap. III. of rice fields and the soaking of hemp, Dr. M. observes, that

"The cultivation of rice is attended with very great inconveniences, as it requires a soil often inundated, and the peasants are obliged to work during a great part of the year with their legs in the stagnant water. These unfortunate people are always pale, are subject to dropsies as consequences of visceral affections, and generally die before forty. The preparation of the flax is not less destructive to the health than the growth of rice. The people are in the habit of steeping this vegetable, which exhales a narcotic and very powerful odour, in pools of water exposed to the sun, and always near to their dwellings. During summer, the fermentation goes on very actively, disengaging a very offensive smell, and the emanations arising from it are pernicious in the highest degree. M. Bourges knew a hamlet where the people were accustomed to steep their flax in places immediately to the south of their houses. Almost all the inhabitants were annually subject, in the autumn, to intermittent fevers. This endemy appeared at first very extraordinary, as the village was situated on an elevated piece of ground, and on a sandy soil. The peasants were also rich in comparison to their neighbours. It struck M. Bourges that the regular appearance of the disease was attributable to the emanations arising from these pits; he advised them to steep the flax in a stream of water instead of a stagnant pool; they did so, and their fever disappeared. Two years after it returned, and it was found that an individual had made a pit unknown to the others; they discovered it, and profiting by their former experience, they insisted on his removing it. The disease never appeared afterwards. This shows how pernicious the emanations arising from the flax pits must be." *

The work increases in interest as we proceed with it: the views of the writer are clear, and his expressions distinct; and we may say of him, "*vires acquirit eundo.*" In the chapter on the geographical and medical classification of marshes, the Dr. has expressed himself so much in accordance with the opinions of some distinguished individuals in this country, who have been content to derive their creed from the book of nature rather than servilely adopt the dogmas of their predecessors, that when it is read with

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* We have been informed by an intelligent friend, that intermittent fevers are very common in the south-east districts of Somersetshire in the autumn; flax pits are there very numerous, and the stench they occasion must be known to every traveller who has passed through that part of the country at that time of the year. If the flax was steeped in a stream, as suggested by M. Bourges, the two evils we have just named would be prevented.—Ed. L.

attention, it must be evident that they have drawn their information from one and the same unerring source. After stating that the effects of these emanations are modified by the temperature of the climate, and the idiosyncrasy of individuals; he further observes, although the identity of their nature is perfectly established, yet it is found that they do not affect a Dutchman as a native of the interior of America; nor do they produce the same results at Vera Cruz as at Sologne.

"These marshy emanations are more powerful in hot climates than in cold; they produce *tertian* fevers in Germany; petechial fevers in Hungary; demi-tertian in Italy, and *the plague* in Egypt. The more intense the heat of the atmosphere, the more rapid are these diseases in their march, and the more frequently are they accompanied by a variety of symptoms. Thus, if we examine the endemic affections in the principal marshy countries, we shall see in Holland intermittent fevers, quartans, tertians, and quotidians, attacking great numbers of persons, but presenting such a mild character that the practitioner has plenty of time to treat them. In Hungary, the diseases arising from the same cause are by far most frequently remittent, and a putrid dysentery, as it is called, affects a large part of the people. In Italy the fevers produced in the neighbourhood of the Pontine marshes, have the intervals between the paroxysms very short. In Spain, the symptoms attending them are more severe, such as the vomiting of dark coloured matter, the yellow colour of the skin, and the violence of the delirium, causing the affections to resemble those of Africa and America. Lastly, in both the latter, the same febrile affections are observed, accompanied by the most violent symptoms, whether the fever be remittent or continued. Cholera morbus, and acute dysentery appear with great severity in the neighbourhood of Bresse and Sologne, as they do near the staguant waters of India, but in the former places they appear less frequently, and attack fewer people. It is clear, that as diseases are found to approach the hot climates, they become more severe; affections of the same system of organs become more acute, and if they be at first *intermittents*, they *assume the continued type*. That it is, in point of fact, the same kind of disease, but modified by the twofold influence of atmospheric temperature and individual constitution.

The best classification of marshes appears to be that of placing them in three series: those of hot countries, those of cold countries, and those of temperate countries. The yellow fever has been, for a long time, very common in the hot and marshy parts of South America; also in Jamaica, St. Lucia, the shores of the Floridas and Carolina, in Georgia, and Virginia. The neighbourhood of marshes in very hot countries has rendered large tracts of country uninhabitable; the population of St. Lucia has been almost annihilated. The Arabs wished to punish the inhabitants of Bassora for an insult which they had received; they diverted the river from its course which washes the walls of the town; they spread the waters over the country, marshes were formed, and fourteen thousand persons perished."

The principal marshes of America and Asia, especially those about the Euphrates and in Tartary, are enumerated, with many sound remarks interspersed. Also those of Africa, such as the swamps on the Senegal river, and those in Lower Egypt. In Europe, the marshes of Andalusia in Spain, those of Sardinia, and the Pontine marshes of Italy, are described with great accuracy. The Pontine marshes are situated in the Roman states, they are about eight leagues long and three in breadth. We find from Pliny * that this was formerly a very

* *Pontinæ Paludes;* Plin. hist. nat. lib. xxvi. cap. i.

rich part of the country, and that it contained twenty-three towns and a great number of villages; now converted into a loathsome swamp by accumulation of sand and pebbles thrown up by the sea, thus intercepting the communication which formerly existed. Among the marshes of cold countries, are classed those of Russia, Courland, Denmark, Holland; the marshes formerly so destructive to health in England are alluded to, certain tracts of marsh in the northern part of Germany; all these are described in the same manner as the former. If the author has been minute in his description of the marshes of distant countries, it cannot be expected that he would neglect those of his own; his attention has, however, been more particularly directed to those of Bresse, Brenne, Sologne, and the Forez. It has been calculated by M. Julia, that if the surface of country now covered with morass was converted to agricultural purposes, it would support a million of population, and afford a revenue to the state of seven millions of francs. In the district of Bresse, rye and oats are the principal crops, and these are in general very poor; there are a few vineyards, but the wine produced from them, to use the Dr.'s own expression, is detestable. The springs are so scarce, that the water generally used by the inhabitants is taken from the ponds formed by the collection of the rain.

"Bourg, the chief town of the department, says the author, was once a very unhealthy place; its inhabitants were, during a great part of the year, the subjects of very severe fevers. These were attributable to the vast fossæ of stagnant and putrid waters with which useless fortifications were surrounded. Louis XV. gave to the town the ramparts and the bastions, and they were destroyed. The ditches were filled up, and the surface was soon changed into pleasant gardens. From that period Bourg has been a very healthy town; the air is mild and agreeable, and it is the resort of strangers. Its hospital is well supported and managed, and during the autumn the beds are occupied by invalids brought from the marshy district of Dombe. If you ask these persons what their complaints are, the answer is, 'J'ai le fièvre.'

The Sologne is an immense collection of water, about two hundred and fifty square leagues in extent; it occupies a considerable part of the departments of Loiret, Loir et Cher, Romorantin and Blois, and Orleans. The tracts of land bounding this morass, and interspersed here and there in its midst, present a most deplorable appearance as to their agriculture and the state of the inhabitants. The type of the fevers which prevail here is, ordinarily, the tertian or quartan, rarely quotidian, and almost always of long duration. The indifference of the inhabitants is so great, that they take no trouble to preserve themselves from, or to remove the disease. Familiarised to it, they are not much interrupted from their ordinary pursuits, and it is with a stupid apathy they surrender themselves to its attacks. It is easy to distinguish at first sight the inhabitant of the hilly country from the peasant of the plain. The former breathes a pure air, drinks good water and good wine, is robust, active, and intelligent; whilst the other has a relaxed flaccid appearance, a yellow or leaden tinge of skin, and less muscular power. He has a carelessness and indifference to surrounding objects, and an obstinacy unconquerable; to which may be added, indolence, the mother of poverty.

The intermittent fevers reign throughout the greatest part of the year, in the plain of Forez; the only time in which they are absent, is the winter, or the early part of the spring. Easy to cure in the commencement,

they become dangerous only when left to take their unchecked course, or when they are treated in such a way as to increase the chronic affections of the viscera, of the chest, or of the abdomen. The liver and its appendages are generally affected with the mucous membrane of the alimentary canal; these give to the exterior of the body the yellow or leaden look I have before mentioned, and which is a characteristic especially of the quartan fièvre of the plain. At the same time that the enlargement of the spleen takes place, the pancreas and mesenteric glands become the seats of chronic inflammation. Œdema commences in the lower extremities, and ultimately becomes general."

The next subject brought under discussion is the special nature of these marshy emanations; the different doctrines which have been maintained from time to time are considered, from the floating of animalcules in the atmosphere, the sulphureous and saline vapours of Ramazzini, and the increased atmospheric density of Hoffman, to the gaseous theories of modern chemists. The absurd opinion of Giannini, of the non-existence of any such emanations, because their precise nature has not been unravelled, is combated with much spirit, and the Dr. in conclusion, recommends the partisans of such opinion to take a trip into Bresse or Sologne, where they may soon be satisfied to the contrary.

Part II.

On the Influence of the Marshy Emanations on Organization.

This division of the work contains, in detail, what was hinted at in the beginning of it. We have combined the action of the air, the water, and of the earth, on the different grades of organization from vegetables to man. The physical habitudes and appearances of the people inhabiting marshy districts are described with minuteness, and from the description it appears that they are a very degenerate race of beings, as destitute of intellectual as of animal vigour; dragging out a miserable existence in ignorance and poverty. The effect of the diet in common use amongst these persons, such as rye bread and dried pork, hard and difficult of digestion, with poor watery vegetables, and indifferent clothing, cannot fail to be such as must predispose the body to the influence of the unhealthy state of atmosphere before described.

"In all marshy countries man loves solitude, and is very reserved; he presents another characteristic, which is that of obstinacy, in decrying against the insalubrity of the climate, and in ascribing the fever, which he so frequently suffers, to any cause but the right. The vices of these people, especially the Bressans and Sologuots, are those of cowardly minds. They do not commit such crimes as require courage; they will not attack a traveller by force of arms, but they meditate some secret destruction for him, as by poisoning, or some such death. By a state paper published by the Prefect, containing a table of the crimes committed in five years, it was found that premeditated assassination was more frequent than simple murder. This is a part of their character, designing in all their actions more revengeful than passionate; more susceptible of revenge than of the power to execute it."

On the pathological action of these agents we must be brief; but the outline of the author's opinions on the subject is as follows: the influence of the marshy emanations on the human body, for to that we shall now confine our attention, is first to produce a peculiar state of constitution which has

been described; that state of the system renders it more susceptible of the future operation of the same causes, and a permanent disorder of the functions is produced. The parts of the body which become the seats of disease are not, in all cases, the same; in one the functions of the brain may be most disturbed; in another the mucous membrane of the stomach; in a third it may occasion dysentery; and further, the author asserts that it may not only occasion great excitement of the nervous system in the intermittent form of fever, but that this *intermittent* may become *a continued fever*, and present all the characters of those which have been called *typhus*. Many cases are given in illustration, which we regret we have not space to insert. In the third division of the work is an enumeration of the diseases caused by the action of these emanations; and as the author has been shown to be an individual of considerable merit, we are inclined to respect his opinions, but more so the facts, which he has collated. These we must however defer to a future number.

Universal Stenography: or a New, Easy, and Practical System of Short Hand, upon the general principles of the late ingenious Mr. Samuel Taylor. By William Harding, a Teacher of the Art. London, 1824. pp. 38. Butterworth and Son, Knight and Lacey, and Simpkin and Co.

Of the work on Stenography, by Mr. Samuel Taylor, published some few years since, it may be sufficient to observe, that whilst it attained to a just celebrity at home, it was not neglected abroad, and that it appears to be at present the prevailing system of the French stenographists and the German students. Of the value of short hand to medical pupils, they must be well aware, as it enables them to preserve, in a legible form, discourses which must otherwise be speedily forgotten, thus rendering the time, which would have been without it almost uselessly employed, a source of future amusement, and a perpetual reminescence of times long since past. Besides, it is probable that in future ages, other Abernethys will arise, and it may be that future Chancellors may want some portion of that steady adherence to justice which so prominently distinguishes the decisions of Eldon. Hence the lecturers will triumph in their weakness, and the pupils will exchange their money for a piece of paper in the shape of a certificate, useful no where but at the College of Surgeons, where something below mediocrity only thrives, where excellence is lumber, and perfection withers under the despotic sway of folly and ignorance.

The practice of Stenography, although very prevalent with the Greeks and Romans, does not appear to boast of very great antiquity in England, and indeed at a period when nothing but monastic learning existed, and the useful arts were in their infancy, that it should have been neglected is not much to be wondered at. Previous to the reign of Elizabeth, no attempts were made to introduce the practice of stenography into England; and it is probable, from this circum-

stance, that it was not till then that the usefulness of the art was discovered, or the necessity for its cultivation manifested; for whatever may be said to the contrary, the origin of most useful arts will be found in the necessities of the times in which they were first developed, and their progress will in a great measure depend on the same causes.

Some attempt at the introduction of this science into Britain appears to have been made by Dr. BRIGHT, in 1588, and fourteen years afterwards, the first English short-hand alphabet was invented by Mr. Willis, since which period there has been no want of works on stenography, as Mr. Harding has shown, by favouring us with a list comprising the names of nearly a hundred authors on the subject; and we have great pleasure in stating, that in our opinion his work is preferable to most of them, for in many respects he has certainly surpassed (at least as far as we have looked into them) all who have gone before him. The advantages to be derived from this science are thus described by Gawtress in his introduction to Byrom's Stenography:—

"Short hand is capable of imparting so many advantages to persons in almost every situation in life, and is of such extensive utility to society, that it is justly a matter of surprise that it has not attracted a greater share of attention, and been more generally practised. With a view to excite a livelier interest in its progress, and to induce those who have leisure to engage with ardour in the study of it, we shall point out a few of the benefits resulting from it.

In England, at least, this art may be considered a National Blessing, and thousands who look with the utmost indifference upon it, are daily reaping the fruits of its cultivation. It is scarcely necessary to mention how indispensable it is in taking minutes of public proceedings. If all the feelings of a patriot glow in our bosoms on a perusal of those eloquent speeches which are delivered in the senate, or in those public assemblies where the people are frequently convened to exercise the birth-right of Britons—we owe it to Short Hand. If new fervour be added to our devotion, and an additional stimulus be imparted to our exertions as Christians, by the eloquent appeals and encouraging statements made at the anniversaries of our various religious societies—we owe it to Short Hand. If we have an opportunity, in interesting judicial cases, of examining the evidence, and learning the proceedings, with as much certainty, and nearly as much minuteness, as if we had been present on the occasion—we owe it to Short Hand. In short, all those brilliant and spirit-stirring effusions which the circumstances of the present times combine to draw forth, and which the press transmits to us with such astonishing celerity, warm from the lips and instinct with the soul of the speaker, would have been entirely lost to posterity, and comparatively little known to ourselves, had it not been for the facilities afforded to their preservation by short hand. Were the operations of those who are professionally engaged in exercising this art to be suspended but for a single week, a blank would be left in the political and judicial history of our country, an impulse would be wanting to the public mind, and the nation would be taught to feel and acknowledge the important purposes it answers in the great business of life.

In addition to these inestimable advantages, *Science and Religion are indebted to this noble art* for the preservation of many valuable lectures and sermons, which would otherwise have been irrecoverably lost. Among the latter may be instanced those of Whitfield, whose astonishing powers could move even infidelity itself, and extort admiration from a Chesterfield and a Hume; but whose name alone would have floated down the stream of time had not short hand rescued a

portion of his labours from oblivion. With so many vouchers for the truth of the remark, we can have no hesitation in stating it as our opinion, that since the invention of printing, no cause has contributed more to the diffusion of knowledge and the progress of refinement, we might almost add, to the triumphs of liberty and the interests of religion, than the revival and improvement of this long-neglected and invaluable art.

Such are the blessings which short hand, like a generous benefactor, bestows indiscriminately on the world at large. But it has additional and peculiar favours in store for those who are so far convinced of its utility as personally to engage in its pursuit. The advantages resulting from the exercise of this science, are not, as is the case with many others, confined to a particular class of society: for though it may seem more immediately calculated for those whose business it is to record the eloquence of public men, and the proceedings of popular assemblies; yet it offers its assistance to persons of every rank and station in life—to the man of business as well as to the man of science—for the purpose of private convenience as well as of general information.

The advantages of short hand in cases where *Secrecy* is required are sufficiently obvious. It is true, that when a system is made public this effect is partially destroyed. Yet it seldom happens that stenographic memorandums fall into the hands of those who can read them; and when the writer has any reason to anticipate such an occurrence, it will be easy, after learning a good system, so to transpose a few letters of the alphabet, and to vary its prepositions and terminations, as to render the writing illegible to all but himself.

The facility it affords to the acquisition of learning, ought to render it an indispensable branch in the education of youth. To be enabled to treasure up for future study the substance of lectures, sermons, &c. is an accomplishment attended with so many evident advantages, that it stands in no need of recommendation. Nor is it a matter of small importance that by this art the youthful student is furnished with an easy means of making a number of valuable extracts in the moments of leisure, and of thus laying up a stock of knowledge for his future occasions. The pursuit of this art also materially contributes to improve the student in the principles of grammar and composition. While studying the rules of abbreviation and connection; while tracing the various forms of expression by which the same sentiment can be conveyed; and while endeavouring to represent, by modes of contraction, the dependence of one word on another, he is insensibly initiated in the science of universal language, and particularly in the knowledge of his native tongue.

The rapidity with which it enables a person to commit his own thoughts to the safety of manuscript, also renders it an object peculiarly worthy of regard. By this means a thousand ideas which daily strike us, and which are lost before we can record them in the usual way, may be snatched from destruction, and preserved till mature deliberation can ripen and perfect them.

A practical acquaintance with this art is highly favourable to the improvement of the mind, invigorating all its faculties and drawing forth all its resources. The close attention requisite in following the voice of a speaker induces habits of patience, perseverance, and watchfulness, which will gradually extend themselves to other pursuits and avocations, and at length inure the writer to exercise them on every occasion in life. When writing in public, it will also be absolutely necessary to distinguish and adhere to the train of thought which runs through the discourse, and to observe the modes of its connexion. This will naturally have a tendency to endue the mind with quickness of apprehension, and will impart an habitual readiness and distinctness of perception, as well as a methodical simplicity of arrangement, which cannot fail to conduce greatly to mental superiority. The judgment will be strengthened and the taste refined; and the practitioner will, by degrees, become habituated to seize the original and leading parts of a discourse or harangue, and to reject whatever is

common place, trivial, or uninteresting.

The *memory* is also improved by the practice of stenography. The obligation the writer is under to retain in his mind the last sentence of the speaker, at the same time that he is carefully attending to the following one, must be highly beneficial to that faculty, which more than any other owes its improvement to exercise. And so much are the powers of retention strengthened and expanded by this exertion, that a practical stenographer will frequently recollect more without writing, than a person unacquainted with the art could copy in the time, by the use of common small hand.

In short, as Mr. Lewis justly observes, 'this science draws out all the powers of the mind;—it excites invention, improves the ingenuity, matures the judgment, and endows the retentive faculty with those superior advantages of precision, vigilance and perseverance.'"

SKETCHES OF THE SURGICAL PROFESSION IN IRELAND.

No. VII.

Mr. MACARTNEY.

To the Editor of The Lancet.

Sir,—Were we to apologize to you and your readers for every deviation from the specific object of our pursuits,—the sketching of Surgical Character in Ireland,—we can hardly think but the case would be more productive of inconvenience than the disease. In the present instance, however, we cannot send forth our licentious aberrations without some qualifying accompaniment of penitential regret, and though pretty much in the situation of the crafty Italian, "even in penance planning sins anew," like him too we hope, by a candid acknowledgement of our offences, to be forgiven. Before we come, therefore, to the pleasing duty of sketching the distinguished individual whose name confers, at least, some importance on this portion of our labours, we solicit your indulgence to a few observations on the Institution with which he happens to be connected.

College recollections are a few of those retained longest, and dwelt on by the mind with an intensity of pleasure seemingly increasing with our years, as if this quality of our nature was meant to recompense us for the loss of a supposed good now no longer within the reach of enjoyment. So the story runs from sire to son, for who has not been amused by the garrulity of old age, as it borrows a temporary elevation of spirit during the recital of the oft-told-tale of academical adventure? But perhaps it is

"Distance lends enchantment to the view,
"And robes the mountain in its azure hue"—

and that these bright links in the chain of memory, if more closely inspected, are only prized by binding us faster to the remaining remnant of life. The feeling, at all events, is general, and we have no inducement, at present, to dispute the expediency of those laws by which man is governed, though to us a college in a great city would seem a questionable source of the romantic, and the association of ideas produced by such an establishment, excites little worthy of retention. The rattling of dice and gurgling of bottles; the midnight brawl and afternoon delights of a debating club; all these, to be sure, have charms for congenial "bloods," but they are pleasures which probably do not bear analysis, so we shall proceed without a word on their rationality.

In disserting upon the seat of our national literature, we shall not, like other keen-nosed antiquarians, debate the question of antideluvian learning in Ireland; neither shall we be tempted to take up the clue of history, and wind our devious way through the labyrinths of fable and fiction, to settle the Grecian or Phenician origin of letters in our native country; nor shall we institute a comparison between the respective merits of the museum of the Royal Dublin Society and the *Eamania* (i. e. seat of fine arts) of Conevar Mac Nessa, however flattering the task might be to our national vanity. Were we, however, inclined for a

sally of humorous imitation, we might take up the question in the same manner as Swift did, when he set about proving, that the Latin and Greek languages were derived from the English, and satisfactorily demonstrate to our readers, that the *Mur-Ollomhan*, founded at Java by that most generous patron of letters in his day, Ollom-Fodlah, was not only the model of the University of Dublin, but that it really excelled the Elizabethean institution in the cultivation of poetry, music, medicine, history, and legislation, for such, we are told, were the sciences taught by the grisly professors of the Bardic school. If, for instance, by any contrivance, human or divine, a "gib" of modern "alma-mater" could be translated back into one of those Druidical seminaries, what would be his surprize on finding himself surrounded by circumstances having so striking a resemblance to those with which he had been lately conversant—an *ard-filea* (chief-bard) or provost, as haughty, and his cheeks as puffed up with proud flesh, as Dr. Kyle himself; gownsmen clad in the *cannathas* (a flowing robe), and their inspired heads surmounted with the *barred* (a conical cap), the very prototype of his own; the whole community governed by a series of laws called the *Il-Breachtha*, precisely the same as those now in use at the "Virgin's" establishment, while each of the candidates, according to their talent, vocation, and standing, were rewarded by an *ollam*, (the degree of A. B. of those classic days of our ancestors.) Without further remark upon these curious coincidences of academical costume, and laws of ancient and modern Druidism, or deciding which was the most useful to mankind, we shall confine our observations to the past and present state of Trinity College; its abuses; literary and political character; school of physic; and, as connected with it, that hybridous anomaly, the College of Physicians.

Antecedent to the uxorious reign of the amiable Henry the Eighth, there were numerous colleges scattered over the country, and Bede informs us, that when a youth was absent from the Continent, it was usually understood that the baronial cub, the "filius nobilis" of that day, was at college in Ireland. Things have taken a sad turn since, for instead of having pupils now from the Continent, our youth are seldom satisfied with a domestic education. But to return, the defeat of religious empire in these realms was followed by the abolition of monastic establishments, and, among the rest that suffered on this occasion, there was one, in the vicinity of Dublin, called All Saints, or All Hallows. Archdill, in his Monasticon, represents it as possessing considerable landed property, all which was delivered over, in holy keeping, to the corporation and citizens, at the annual rent of four pounds a year, a good bargain, doubtless, or money must have been then very scarce. During the remainder of the reign of Henry, the fertile fields of Hoggin Green (for so the abbey lands had been called) were appropriated to the private accommodation of the Lord Mayor's bullocks. On the accession of Elizabeth, various attempts had been made by Perrot, Chief Justice of Ireland, to form, or rather to remodel, the existing college, attached to the Cathedral of St. Patrick's, on Reformation principles; but Archbishop Loftus, not pleased with the loss of some perquisites arising out of the revenues of that establishment, opposed Sir John Perrot, and ultimately persuaded the Queen to grant her license for a new College, as he also did the worthy Burgesses of the Corporation, to give up the lands of All Hallows for the site. The pious work was commenced by rasing to the ground the old monastery, and on the 15th of March 1591, the first stone of Alma-Mater was laid by Thomas Smyth, Lord Mayor of Dublin. It had scarcely begun to disperse the gloom of Irish ignorance, when its labours had been nearly terminated by the insurrection of Ulster, headed by the celebrated chieftain O'Nial; the lands allotted for its support, out of the spoliated estates of the natives, being no longer productive to the treasury. The zeal of Loftus and Gardiner repaired the temporary loss, by allowing the fellows 46*l.* in addition to their former stipend. The Queen too, moved by the prayers of the suffering community, granted them 200*l.* more,

from the next plunder committed by her myrmidons in Ireland. In after times it experienced the royal bounty, and James and Charles conferred new benefactions and new charters. Such is the origin of Trinity College, founded in rapine, conducted on the narrowest principles of bigotry, and, to this hour, a lasting monument of the political fallacy, that the religion of a people is to be ever subverted by the sword of persecution or penal enactments.

It is only of late that the growing influence of Catholicity in Ireland, and the extension of liberal principles in England, forced back the penal bolt that so long excluded the Roman Catholics from all participation in the benefits, derivable from a school drawing its chief support from the confiscations of their ancestral domains. No wonder the proscribed Catholic, as he walked its halls, that rose as if in triumph over his subjection, should burn with such feelings as we cannot describe, because we only know them by placing ourselves in his political condition.

After two hundred years that this college has existed, what treasures has it bequeathed to posterity? In vain you search its archives for one name that occupies a place in the public mind; its history is a mere blank—a pass-word of derision amongst the literary institutions of the world. True, some men of eminence, as Swift, Goldsmith, and Congreve, have passed through it, but they did so unnoticed, except by being illared, and they have taken care to record their contempt of its conductors in terms too pointed and sarcastic to be forgotten. The question has naturally arisen,—how are we to account for the almost total silence of its numerous professors? We confess, that while some sages maintain that poverty is the genuine source of inspiration, and while others think beef and claret are equally entitled to that distinction, it is no easy task to resolve the difficulty as it regards Trinity College, for we believe that the aggregate number of its fellows have experienced the influence of every degree on the dietetic scale. It is quite in vain, therefore, to look to a full or an empty stomach for an explanation of this question, for we believe the evil not to be at all of visceral origin. The fellows are very often needy adventurers from the classic soils of Munster or Connaught, who, having exhausted their Entick under the hedge, come up to town to drink deeper of the points and particles of Scrivelius or Eustathius in the garrets of the University. Having deposited their "Path to Paradise," and religion, at home with the parish priest, and being taken with the bright prospect of a scholarship or fellowship, their whole time is devoted to the attainment of elementary knowledge—to finding out the husks of Parnassus. It is well known, that the prize is to be won, not by superiority of intellect, but by plodding perseverance; and the consequence of this pernicious practice is, that few persons submit to a drudgery as unprofitable as it is, in general, disgusting to a man of real genius. From this it follows, that men of second-rate mind are usually the candidates, and that having obtained the object of their ambition, there is generally a collapse equal to the former excitement, and that the remainder of their life is devoted to the employment of the *otium cum dignitate* afforded by an income of from two to four thousand a year. To these causes, tantamount perhaps to the explanation of the silence of the "dumb sister," as it has been called, it might be added, that the duty of lecturing is discharged, indiscriminately, by all the fellows, while it is well known that a contrary usage has obtained for the Scotch University a pre-eminence, in this respect, over similar institutions. An attempt, however, has been just made, we perceive, to remove the stigma of literary supineness from this body, by the publication of a journal upon the plan of Brewster's and similar works, so that, after centuries of silence, Trinity College has been forced to commit an act of authorism, to allay public indignation. We confess that were we called to sit in judgment upon a work as transcendantly brilliant as the present is superlatively dull, and coming from this institution, we should be inclined to try the bantling of Momus and Memnon by the severest laws in the code of criticism. We have no

taste for forced fruit, whether of terrene or of mental culture, and we can consider the present specimen but a bloated pompion, without the flavour or raciness of natural productions, and already floating down the stream of Lethe to oblivion. When we first heard that Alma-Mater was pregnant, we did, in silence, contemplate an abortion, knowing that the sterile old dame was past the years of having a vigorous offspring. In mercy to the Thebans, who have been accessary to the birth of the Dublin Scientific Journal, we must inform them, that their plan of operations is erroneous, and that the execution is not much better. It is to no purpose that this journal reckons, amongst its contributors, a few men of the highest acquirements, such as Brinkley, in astronomy; the circulation of a merely scientific work, in a country like this, must be always extremely limited, while in other countries a sale cannot be at all expected, from being supplied with much better works and at shorter intervals. We doubt much whether the combined intellect of Dublin would support a tolerable periodical for twelve months; the elements of such a work as would ensure itself a safe sale, do not, we believe, exist in the country. Many of the best contributors of the English periodical press we know are Irish, but these writers would as soon commit their productions to the flames, as send them before the public under the damning auspices of a Dublin title-page; it would be so much labour lost. For any thing Trinity College will be able to achieve, we must, we fear, be content with importing literature of London manufacture, just as we do other fashionable commodities. Of the death of the journal that has excited these observations we are as certain as that we wish it a better fate.

So much for the literary state of our University, in the third century of its age, and in the *millenium* of its imbecility. We have been more emphatic in our censure than we might otherwise have been, had we not been impressed, at an early period, by the lying statements which are daily put forward by some writers, an elaborate specimen of which trash may be found in Rees's Encyclopedia, where the author represents this college as a paragon of perfection, and modestly asserts, that it is much better for the public that the fellows should devote their time to instructing the pupils in the elementary parts of knowledge, and in superintending their morals, than in composing books for the aggrandisement of their own character. As to teaching the elementary parts of learning, even though the statement were as correct as it is notoriously false, we suppose any other schoolmaster would do the same just as well; and with respect to the morals of a university, in the common acceptation of that term, though no puritans ourselves, we should not have the least objection to see the man who could talk such folly placed a few hours in the pillory for his impudence. How any writer could venture, even in this "age of bronze," to put such sentiments on paper is to us a mystery. It is not improbable but we may ramble into Alma-Mater some evening that we have leisure, and give a running commentary on the state of society within the holy walls of All Hallows. In the mean time we must proceed to the school of Physic in Ireland.

The school of Physic, as every person is aware who has consulted an Irish Almanack, is composed of six Professors, three of them appointed by the University, the other three by the College of Physicians, so that it is a joint concern between them; and for the greater accommodation of the pupils, the lectures are delivered in Sir Patrick Dun's Hospital and at the College, distant from each other about half a mile. At what time, exactly, this union took place we do not now recollect, but it were much to be wished that the partnership were dissolved, or that a more convenient coalescence could be effected. There is a grievous loss of time and shoe-leather in following these luminaries from place to place, hour after hour, and a "rolling stone," they say, "seldom gathers moss." Between them they make sad business of it, and though they labour thus in common, yet each retains its own peculiar prerogative—the University, of making Bachelors and Doctors of Medicine;

the College of Physicians, of making Fellows, Members, and Licentiates. Now we think that a university should have nothing at all to do with conferring medical degrees, for we know some of these same bachelors who are not fit to superintend a kennel of sick dogs. On the other hand, the College of Physicians, by what we suppose the law of involution, confer the most insignificant title (a license) in their vocabulary of honours upon those who have, in a great measure, the charge of the sick, and reserve the *summas honores medicinæ* for those who, in general, do nothing at all. To a mind unsophisticated by corporate ideas, which are usually of a very complex nature, it would appear, that the persons intrusted with the care of the sick, or engaged in the practical departments of their profession, are those whose experience should be most severely attested, and rewarded with the highest degree of sanction in the power of their Examiners to bestow. *Se diis aliter visum*—to those concerned it has appeared otherwise. We know that an exposure of such absurdities is a hopeless task, and that the personal interests of those individuals, in whose hands the remedy lies, will prove an overmatch for our remonstrances. So we abandon them for the present, with an intention of resuming our efforts in a future number.

ERINENSIS.

[To be continued.]

FOREIGN DEPARTMENT.

ANALYSIS OF FOREIGN MEDICAL JOURNALS.

REVUE MEDICALE—FEVRIER.

A remarkable case of Poisoning by Prussic Acid, with some Observations on the employment of Ammonia as a remedy.

Towards the latter end of August, M. B., a physician of Rennes, of a strong constitution, prepared some hydrocyanic acid, and was induced to take a portion, from which he felt no inconvenience. On the 3d of September following, at 11 o'clock in the morning, he took in some coffee almost a tea-spoon full of the prussic acid, prepared according to the method of Scheele. He found this stronger than his own, but still it had no material effect. At one he dined, and about seven o'clock in the evening he again took the same quantity as before, prepared by M. Delonde. He found this stronger than the preceding, but said, "Still it has no effect." He immediately left the apartment where he made this experiment, but scarcely had he advanced three steps in the street, when he felt a sort of shock in the head, which he considered as the precursor of some mischief. He collected himself, and said, "*Ma Foi*, it has done something! Give me——" and immediately fell, as if thunderstruck. *The first symptoms* were sudden cessation of the intellectual powers, trismus, difficult respiration, followed by cold extremities and stertorous breathing; an odour of bitter almonds exhaled from, and distortion of, the mouth; pulse scarcely perceptible at the left, but much stronger at the right wrist; the face discoloured and swollen; pupils fixed and dilated; in short, in every respect similar to a man in the last stage of apoplexy. *Frictions, with the tincture of cantharides, and pure ammonia; compresses soaked in the same mixture; and large sinapisms were applied.*

The trismus increased, until at length a convulsive action took place, greatly resembling opisthotonos, which lasted for some minutes. An iron spoon was slipped between the teeth, and, by means of a small opening, a feather was introduced as far as the throat; this stimulus excited nausea, and some black mucus was vomited. The essential oil of turpentine in some coffee was then given. Ice was also applied to the head. This treatment was persevered in for two hours and a half, when the patient evinced some return of his senses by the following words, "*I have taken prussic acid—I recommend my son to you—give me air, and let me die.*" He likewise recognised some friends surrounding him. The intellectual faculties returned by degrees. There still existed a considerable dyspnœa; sinapisms were applied, and a strong

purgative enema administered, on the action of which, a large quantity of flatus was disengaged, strongly impregnated with the odour of prussic acid.

By six in the morning he was capable of being removed to his own house. On the 4th, slight febrile symptoms came on; he also complained greatly of his mouth, which was intensely inflamed, and much ulcerated. Inflammation of the lungs supervened, but which was eventually removed, and on the sixteenth day after the accident, he was enabled to walk out; and at present enjoys even better health than before the accident.

From the above circumstance, it is evident that the prussic acid of the shops varies not only with respect to the intensity and rapidity with which it diffuses its baneful principles, but very probably in its component parts. In fact, M. T. tells us, that four drops of the acid prepared according to Scheele, had no other effect on him, than a sensation of constriction about the upper part of the pharynx, whilst the mere inspiration from a flask containing the acid which M. B. took, occasioned a great irritation about the top of the nasal passages, accompanied with pain in the head, and giddiness; alcohol and pure *ammonia* immediately removed it. Dr. MURRAY has also found that ammonia, in the dose of a few drops, instantly dispels the severe headaches incident to those persons working in the laboratories where the prussic acid is made. This acid appears to act suddenly on the brain, by suspending the nervous influence, while the nerves of the spine still continue to act. It besides effects the organs of respiration, since the most formidable symptoms were those of very great oppression in breathing; suppression of urine also lasted for four days.

From the impossibility of deglutition, M. T. recommends the introduction of a gum elastic sound into the nasal passages, through which the counter poison could be received in the stomach. He concludes by observing, too much care cannot be taken in selecting a medicine of such powerful and varied strength.

New Doctrine of Mental Diseases, deduced from numerous Cases in the principal Hospitals of Paris. By M. BAYLE.

The name of the author of the present Memoir is favourably known to a great number of the profession of this country; and his investigations into the morbid anatomy and pathology of the brain have placed him on an equality with PINEL and ESQUIROL; with whose works perhaps we are better acquainted.

The proximate cause, observes M. B., of the different species of insanity is not always the same; sometimes, although rarely, it consists of some lesion of the moral powers only, the patient labouring under some dominant error which appears to take possession of the mind. In the greatest number of cases the mental alienation is the result of physical injury, which is generally found to be a chronic inflammation of the meninges, or a specific or sympathetic irritation of the brain. The chronic inflammation of the meninges which gives rise to the aberrations of the mind is of two kinds. It may be seated on the external surface of the cerebral arachnoid, and on the reflected portion of the arachnoid over the dura mater, and to this I have given the name of *chronic arachnitis*, or it may be seated on the internal surface of the arachnoid and pia mater, when it generally spreads to the ventricles, this I have called *chronic meningitis*, as it effects at the same time the pia mater and arachnoid, and has a protracted course. It will be my endeavour to trace in a succinct way the organic lesions and the symptoms produced by *chronic meningitis*, and then to offer a series of propositions in which the opinions I have to advance will be more fully stated. These opinions are derived from a most careful observation of nearly two hundred cases in the *Maison Royale* at Charenton, one of the best conducted institutions for the treatment of insane persons in France.

The principal object of M. Bayle is to show that the greatest number of cases of mental alienations are owing to chronic arachnitis, not only

as the winding up of a more acute attack, but as being produced by a vascular congestion of the pia mater, which is sometimes marked by loss of memory, redness of the face, insensibility, and paralysis, or, in a less degree, by vertigo, noises in the ears, and pains in the head. The anatomical characters of chronic meningitis are next examined, and the appearances of the different parts are described with great accuracy. The pia mater is found more or less red and injected; the arachnoid becomes thickened, loses its transparency, increases in resistance and tenacity, pours out a large quantity of serum; forms adhesions with the reflected or dura matral portion, and with the pia mater; sometimes presents a granulated appearance, and at other times is found covered by a layer of albuminous matter. Some or other of these appearances are generally found.

Thickening of the Arachnoid.

This is a common consequence of chronic inflammation, and although this membrane is so delicate, in the healthy state, that it has been aptly compared to a cobweb, I have seen it present various degrees of thickening which it would be very difficult exactly to describe. I have observed that it has sometimes acquired the thickness of the pleura, of the pericardium, of the dura mater, and even have found it as thick as the coats of the stomach, having somewhat the appearance of parchment soaked in water.

Adhesions of the Meninges.

These adhesions of the surfaces, which in a natural and healthy state only lie in contact, are frequently found united by inflammation to each other, and to the surface of the cerebral convolutions. This, however, generally takes place in patches or points of various size, from a millet seed to a crown piece; but they have never been found in those portions of pia mater which dip down between the convolutions. Many of the organic changes, which we have merely repeated, are described with a minuteness which would be uninteresting to many and useful to none; we shall, therefore, proceed to take glance at what has been said on

The symptoms of Chronic Meningitis.

These are, of course, of a diversified description, and to render them as clear as need be, the author of this paper has divided them into three principal classes, intending thereby to describe the progress of the disease at three distinct periods, and to them he has given the names of *monomania*, or partial insanity; delirium; and complete madness.

First period, or that of monomania. The symptoms manifest themselves either immediately, or a few days after an attack of cerebral congestion. The patients are seized with vertigo, stunning noises, loss of recollection, and partial or complete paralysis. The feelings appear to be more or less elevated; the patients imagine that they are rich, powerful, and loaded with honours and civil distinctions. Some imagine that their fortune is doubled, quadrupled, and so on; whilst others, forgetting the miserable state in which they were when their insanity began, imagine that they are engaged in projects which must bring to them immense sums; they purchase every thing they meet with, and are constantly occupied in making great collections of whatever they can lay their hands on. Impressed with these ideas, they talk of them without ceasing, and appear to be wholly engrossed with such considerations. These ambitious ideas are varied in their application, but they generally fix upon some great object, and the unfortunates wish to appear as emperors, principal governors, and so on. Their other functions are all enfeebled, and are incapable even of carrying on any reasoning even on those points on which they are not the most affected.

The second period of the disease, which has been called *mania*, is marked by a delirium more or less severe, in addition to the prevalence of these ambitious notions described as belonging to the others. In fact, M. Bayle appears to have failed in drawing anything like an accurate line of distinction between this and the first,

The symptoms are more severe. This stage of the disease has been divided into two degrees, and these degrees subdivided into species, but we shall not follow them. The third is the stage of *complete madness*, and either is produced by the long continuance of the two first, or sometimes appears suddenly, not being preceded by them. The following corollaries appear to present a good outline of the opinions entertained by the author of the paper, and we shall introduce them.

1. Chronic meningitis is the proximate cause of about one-fifth of mental diseases in males, and only of about one-thirtieth in females.

2. It is ordinarily produced by a sanguineous congestion suddenly or slowly, of the pia mater.

3. It commences on the internal surface of the cerebral arachnoid, from which it extends to the other parts of that membrane, and to the pia mater covering not only the surface of the hemispheres, but also the ventricles.

4. It presents commonly three periods, that is to say, one of sanguineous congestion of the pia mater, an inflammation of this membrane, and that of serous effusion, giving rise to certain varieties of alienation as already described.

5. The delirium constantly depends on the irritation which the inflamed pia mater and arachnoid produce on the cortical substance of the brain.

6. & 7. The exaltation which characterises the first period of the disease is the result of the congestion of the pia mater, and the paralysis, more or less complete, depends upon the degree of pressure caused by this congestion on the brain.

9. & 10. The agitation and excitement, manifested in the second period of the disease, are the consequences of the inflammation extending from the pia mater to the grey substance of the brain, and that extension of inflammation is generally followed by convulsive tremors, grinding of the teeth, and tetanic symptoms.

14. The cessation or the diminution of the state of agitation, the weakness, and imbecility of the intellectual faculties, and the paralysis, general or partial, are the consequences of a compression of the brain, either by a serous effusion into the cavity of the arachnoid, a serous infiltration into the substance of the pia mater, or lastly, into the cavities of the ventricles.

Such are the opinions M. Bayle has to offer on the proximate causes of insanity, and it would appear from these, that in the treatment of such persons nothing more is required than to employ such remedies as are calculated to remove the different degrees and stages of inflammation.

Case of Spontaneous Obliteration of the Popliteal Artery.

M. Nicod read at one of the recent sittings of the Surgical Section of the Royal Academy of Medicine, a case of an individual who, without any apparent cause, was seized with a great swelling of the right lower extremity. A sensation of coldness soon followed, and phlyctenæ, with other symptoms of sphacelus, made their appearance. The patient complained of great general weakness, and sphacelus made its appearance even at the knee. Amputation became necessary, and the case did perfectly well. On examination of the limb, it was found that the popliteal artery was quite plugged up with a firm and almost friable coagulum. The lower arterial branches were found quite empty.—*Archives Gen. March.*

On the absurd Regulations of the College of Physicians, and on the Causes of the decline of the Medical Profession.

To the Editor of THE LANCET.

SIR,

That the medical profession is on the decline has been, for some time past, a matter of common observation; that is to say, that there are much

fewer eminent and money-making physicians than there used to be, and that, in general, the medical branch of the profession are gradually yielding, to the surgeons, the rank, fortune, and consequence which they once possessed in society. Several causes may be assigned for the fact. In the first place, the division of the healing art into physician and surgeon is of itself an evil, and has been publicly declared so by many eminent writers. In Scotland, the two branches are united, and the consequences are very favourable to medical practice. In London, although every man may on his own responsibility practise as surgeon, yet the College of Physicians absurdly discourages the practice among its members. The natural consequences of physicians being exclusively consulting doctors, and never operating nor undertaking what are called surgical cases, is, that they very frequently want anatomical and physiological knowledge; in consequence of which, many sensible persons prefer, even in *strictly medical cases*, to consult some eminent surgeon, whose whole course of study is more calculated to lead to a correct knowledge of diseases in general than the contracted education and limited practice of a mere consulting physician is. This is the present state of the case in London; on the other hand, in the country, those few physicians who have paid attention to anatomy and surgery often operate, which they have legal right to do, and by this means alone they are enabled to maintain an existence in the country, where there is very little money spent in fees, the apothecaries absorbing most of the business of the profession.

Independent of the above, there is an absurd and, I might say, almost gothic and barbarian law (or rule, at least) still in force respecting the mode of getting into the medical profession, and of arriving at its highest supposed honours. In order to be Fellow of the London College of Physicians, a man must graduate as M.D. of one of the English Universities; at both of which, in order to graduate, he must take the Protestant oaths, and swear to the 39 Articles of what is called the church of England. At the College of Physicians too, a man is forced to take the sacrament in the forms of the church of England. Now when we consider how large a portion of physicians have always been dissenters, how many are deists, that some are catholics, and that few in comparison come out of church of England families, this rule must, in these enlightened days, appear as a monstrous outrage on the principles of common sense and the dignity of science. I mean no disrespect herein to the holy catholic church, to the church of England, or to any other sectarian community, but I say that it compromises the honour and dignity of a liberal profession, to confine its members to any particular faith. Moreover, the natural dislike which conscientious and intelligent men have to take any oaths *pro formâ*, which they cannot in *re verâ* assent to, has, to my certain knowledge, caused Cambridge and Oxford, and consequently the London College to lose some of the most able physicians, who would have done credit to those corporate bodies, and whose services would have been of use to the public at large. I could name many such who have graduated, and who also practise abroad and in Scotland. And I sincerely hope, now that Parliament are devising a bill to relieve Catholics from their disabilities, the learned and liberal members who are framing the bill will insert some clause which shall relieve Catholic physicians from the necessity of the Protestant oaths, and thus enable them to graduate at the Universities, and to partake of the advantages, if any there be, of the fellowship of the London College.

Observing that THE LANCET is at present more widely circulated than any other of the medical journals and medical publications, I have taken the liberty to request you will, if agreeable, give this an early insertion, and you shall hear again, on a topic still more important, from, Sir, your constant Reader,

MEDICUS.

EPIDEMIC-RHEUMATIC FEVER

To the Editor of THE LANCET.

SIR,—Should the following information be new to you, you will perhaps give it a corner in your next number; it is contained in letters just received from Calcutta; its publication in THE LANCET may elicit some further notice concerning the epidemic, than that supplied by my correspondents.

I am, Sir,

Your humble Servant,

W. JOHNS, M.D. F.L.S.

14, *Oxford-road, Manchester,*
April 18, 1825.

"The whole of the inhabitants of Calcutta, with very few exceptions, have been laid up with what the faculty term an Epidemic Rheumatic Fever. It generally lasts about three days, and leaves the patient exceedingly weak. I believe that in our circle, Mrs. L. is the only one who has escaped. It has been so general, that business at court, auctions, &c. has been suspended, and in some places, from the illness of ministers, divine worship also has been suspended. I never saw any thing like it in Calcutta before. You will be glad to hear, however, that the fever has been so yielding, that in very few instances has it terminated in death."

Another Correspondent, referring to the same subject, after saying that a party had removed to a short distance from Calcutta, after having been reduced by the disease, thus continues, "We are now residing at S—, to which place we have removed for our health, both of us having been ill with a rheumatic fever, which has been epidemic;* the disease has scarcely in any instance proved fatal, but the distress and inconvenience it has caused throughout Calcutta has been most lamentable. It has raged like a plague, scarcely any public business during many days could be carried on. Natives and Europeans have both been equally affected by it. I am happy to say it is now (August 4) in some degree abating, though many have had relapses."

* Dr. JOHNS' Correspondents do not appear to be attached to the medical profession.—ED. L.

HOSPITAL REPORTS.

MIDDLESEX HOSPITAL.

Case of Fractured Ribs.

Thomas Day, aged 63, was brought into the Hospital late on Saturday night (9th March). It appears that he had been knocked down by a hackney coach, the wheel of which had passed over the chest.

10th. Upon careful examination this morning, we find the four inferior true ribs of the right side fractured, about an inch anterior to the angle; the 7th rib being also fractured close to the spine. The four upper false ribs of the right side fractured, near to their cartilages; and the eighth rib, like the 7th, fractured at its neck. On the left side we found the 4th, 5th, and 6th ribs fractured posterior to the angle. He has a full pulse (about 90); breathing very laborious and anxious; not much acute pain upon inspiration; his countenance has a livid hue. He was directed to be bled to 12 oz. and a bandage to be passed slightly round the chest.

11th. We found him much the same as yesterday, but somewhat relieved by venesection; the blood has not an inflammatory appearance; his respiration is still exceedingly laborious, all the assistant respiratory muscles being strongly in action. His breathing conveys to the ear the "mucous guggle," the bronchial passages containing a large quantity of that fluid. He has viscid expectoration, slightly tinged with blood; the pulse is diminished in force and frequency.

13th (noon). We find him much worse to-day, complaining of acute pain, upon inspiration, at the back part of the left lung. Pulse 100, but soft and compressible. He was ordered to take a dose of castor oil.

14th. We learn from the nurse that he passed a very restless night; his breathing this morning is exceedingly anxious, his pulse 104, and full; tongue dry; the face has a livid appearance; the sensorium much affected.

V. S. ad. ℥xij. *statim.*

We learn that he found much relief from the bleeding, but that about two hours after, when sitting up in bed, he fell back and suddenly expired.

The blood was strongly buffed and cupped.

Post-mortem appearances.

We understand that a *very private examination* was made of the thorax. We believe that a considerable quantity of bloody serum was found effused into both sides of the chest. The ribs at the back part, on the left side, were fractured, close to the spine, and had passed through the pleura. The pleura exhibited marks of acute recent inflammation, there being adhesions between the pleura pulmonalis and costalis of recent formation.

The accidents admitted this week are,—a case of compound fracture of the tibia and fibula; a fracture of the humerus, with an extensive lacerated wound of the thigh; a case of fracture of the os ilii; and some other accidents of minor importance.

Mr. BELL'S OBSERVATIONS ON HERNIA.

The man whose case we have just given, laboured under scrotal hernia of a reducible kind, and Mr. Bell took the opportunity of showing the operation for hernia * to a number of pupils. Mr. B. first proceeded to give instruction with respect to the first incision to be made in operating for hernia.

"*I have seen*," said he, "the incision carried from top to bottom in a large hernia, and also the tunica vaginalis opened by the same incision. Now, Gentlemen, when I speak of *bad surgery*, some of you are unkind enough to think *I allude to my Colleague* (a laugh), but there is such a perfect *good understanding* between myself and Colleagues, that *we are all responsible for any faults* that may happen in performing an operation."

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* We hope that Mr. Bell will send a *special invitation* to his worthy colleague to attend his next demonstration of hernia.

A MEDICAL PRACTICE, with a Retail Shop, in an extensive Thoroughfare, to be disposed of, on very advantageous Terms, in consequence of the present Gentleman being under the necessity of quitting it for Foreign Service. The Stock of the Shop, together with the Fixtures and entire Furniture of the House, may be purchased for 250*l.* Nothing will be required for Goodwill, and a proper introduction will be given. Rent and Taxes low.

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A Member of the London College of Surgeons, of extensive Knowledge and Experience in the Three Branches of the Profession, healthy, active, and of good address and character, wishes to engage with a Gentleman in good Country or Provincial Town Practice, as an ASSISTANT.

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Just published, price 1s., by J. Bulcock, 163, Strand.

THE ORACLE OF HEALTH, ECONOMY AND GOOD LIVING
By Dr. CRELL.

No. 21, containing Sir A. Cooper's Cure for the Bilious—Dr. Darwin's Remedies for Want of Appetite—Dr. Scudamore on Gout and Rheumatism—Mr. A. Rennie's Cure for Scrofula—New Remedies for Costiveness, Indigestion, Worms, Consumption, Liver Complaints, Inflammation, &c.—White Clothes warmer than Black, proved by Experiment—Death from a Scratch—Apoplexy from eating Cheese—On Fish, by Professor A. Duncan—On the Crying of Infants, by Professor Burns of Glasgow—Desk Diseases—Low Spirits—Disorders cured by Music—Medical Religion—Lawrence, Abernethy, Sutleffe, and the Glasgow Pharisee—Confessions of Dr. Uwins—Great Discoveries by Mr. Ben, Dr. Venables, &c.—The Phrenological Organ of Tune, a curious case, &c.

MEDICAL ADVICE; No. 1, Indigestion; and No. 2, Bilious and Liver Complaints, price 1s. each.

On the 31st March, 1825, was published, by T. Clerc Smith, at the Public Library, 36, St. James's-street, (corner of Jermyn-street) price 1s.

No. I.—THE AURIST; or, Monthly Medical Guide for the DEAF; in which will be introduced, Observations on the various Remedies, either ancient or modern, recommended in this Country, or on the Continent, for Diseases of the Ears, with Translations and an Analysis of Foreign Works on the subject. Edited by W. WRIGHT, Surgeon Aurist to her late Majesty Queen Charlotte, Author of "An Essay on the Ear"—"An Address to Persons afflicted with Nervous Deafness"—"Observations on the improper use of Mercury in cases of Nervous Deafness"—"Lecturer on the Anatomy and Pysiology of the Organ of Hearing," &c. &c.

Communications to be addressed (Post free) to the Editor, at his House, 15, Prince's-street, Hanover-square; or to be left for him at the Publisher's.

Contents of No. I.—Advertisement as to the objects of the Work—on the use of the word "Deafness"—on Remedies advised, even in Scientific works, with their Evils—Balsam of Peru and Ox Gall—Soap and Water—Corrosive Sublimate and Lime-water, a chemical error—Extraneous Substances in the Ear, improper advice respecting—Ruptnre of the Drum of the Ear on Drury Lane Stage—Anatomical Error as to Extraneous Substances in the Ear—Particular Application of Electricity—Error respecting—Better mode advised—Warm water, its effects—Examination of popular Remedies—Garlic and Oil advised in the newspapers for pain in the Ear—More safe Applications—A Medico-Theologian's errors and inconsistency—Boiling Mercury in water, its effects—Want of Christian Charity—Electricity, curious method of applying it at a Provincial Infirmary—Cold Bath—Artificial Bath of Bareges Water at Paris, for Deafness—Sulphureous Waters—Harrowgate—Sulphureous Salt from India—Salt put into the Ear—Salt Water—A new method of treating Fungous Granulations and Fleshy Excrescences in the auditory passages, its success—Analysis of a Treatise on Diseases of the Ear, by J. M. G. Itard; his want of liberality—Leonardi da Vinci; his Anatomical Drawings, in his late Majesty's library—His present Majesty's curiosity respecting them—Duverney, as to small Bones of the Ear; period when they are formed in the fœtus—On the improper Correction of Children, &c.

It is expected the Work will be completed in about Twelve Numbers.

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